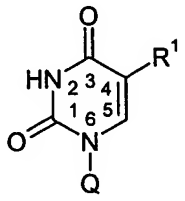
In the Claims:

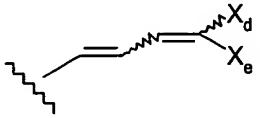
Please cancel claims 2 to 52 without prejudice or disclaimer. Please add new claims 53 to 83, as follows:

53. (NEW) A compound or a pharmaceutically acceptable salt of the compound, wherein the compound has the structure:



wherein:

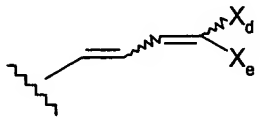
(i) R^1 is a group:



wherein X_d is H; and, X_e is Cl or Br;

or:

(ii) R^1 is a group:

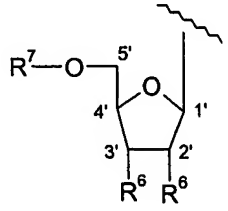


wherein X_d and X_e are independently the same or different and are selected from Cl, Br, I, and CN;

or:

(iii) R^1 is a group:

wherein Q is:



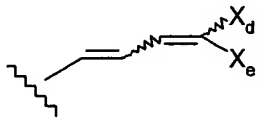
wherein each R^6 is independently -H, -OH, $-OC(=O)CH_3$, or F; and,

R^7 is -H, a phosphate group, a phosphodiester group, or a phosphoramidate group;

wherein the compound may be in any enantiomeric, diasteriomeric, or stereoisomeric form, including D-form, L-form, α-anomeric form, and β-anomeric form.

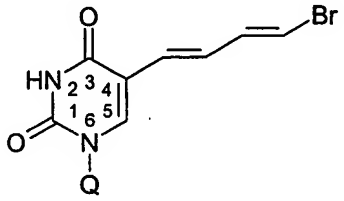
54. (NEW) A compound according to claim 53, wherein:

R^1 is a group:

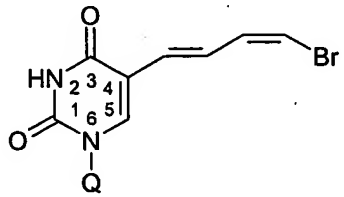


wherein X_d is H; and, X_e is Cl or Br.

55. (NEW) A compound according to claim 53, having the structure:

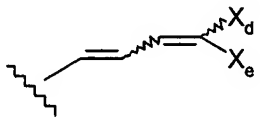


56. (NEW) A compound according to claim 53, having the structure:



57. (NEW) A compound according to claim 53, wherein:

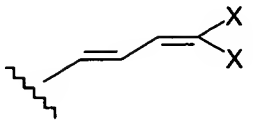
R^1 is a group:



wherein X_d and X_e are independently the same or different and are selected from Cl, Br, I, and CN.

58. (NEW) A compound according to claim 53, wherein:

R^1 is a group:

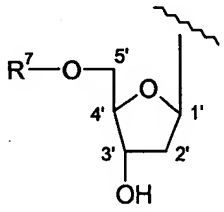


wherein each X is selected from Cl, Br, I, and CN.

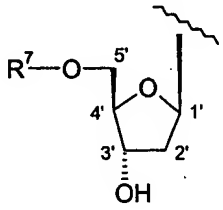
59. (NEW) A compound according to claim 58, wherein X is Cl or Br.

60. (NEW) A compound according to claim 58, wherein X is Br.

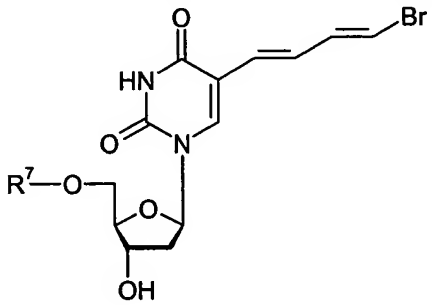
61. (NEW) A compound according to claim 53, wherein Q is:



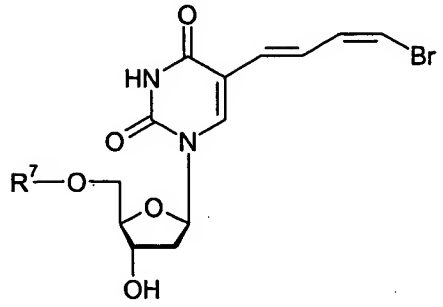
62. (NEW) A compound according to claim 53, wherein Q is:



63. (NEW) A compound according to claim 53, having the structure:



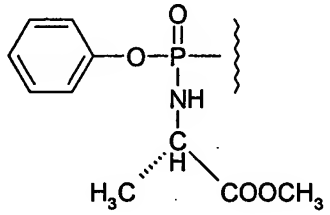
64. (NEW) A compound according to claim 53, having the structure:



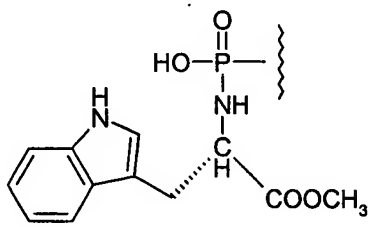
65. (NEW) A compound according to claim 53, wherein R^7 is -H.

66. (NEW) A compound according to claim 53, wherein R^7 is a phosphoramidate group derived from an amino acid.

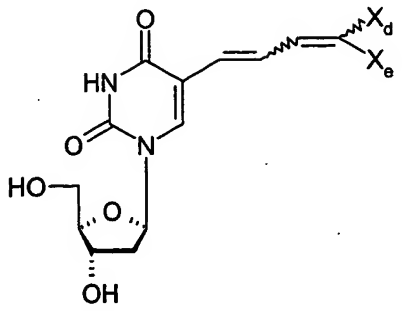
67. (NEW) A compound according to claim 53, wherein R^7 is:



68. (NEW) A compound according to claims 53, wherein R^7 is:

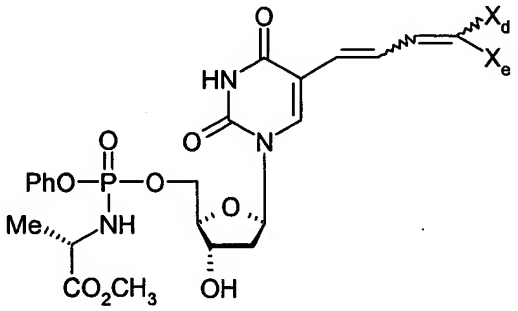


69. (NEW) A compound according to claim 53, having the structure:



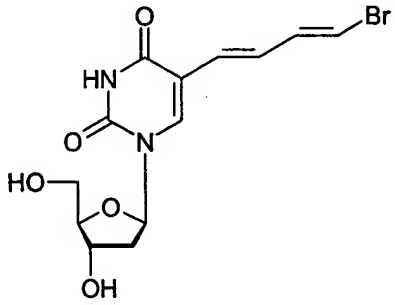
wherein X_d is H; and, X_e is Cl or Br.

70. (NEW) A compound according to claim 53, having the structure:

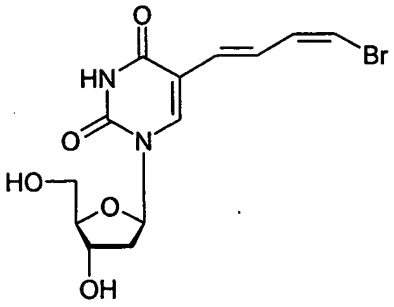


wherein X_d is H; and, X_e is Cl or Br.

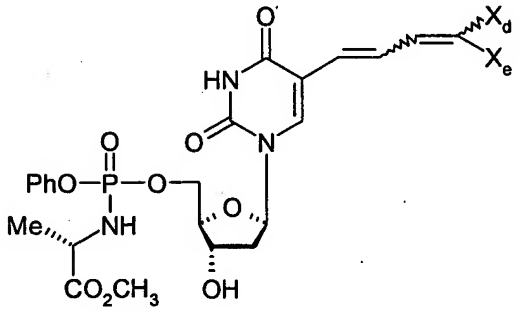
71. (NEW) A compound according to claim 53, having the structure:



72. (NEW) A compound according to claim 53, having the structure:

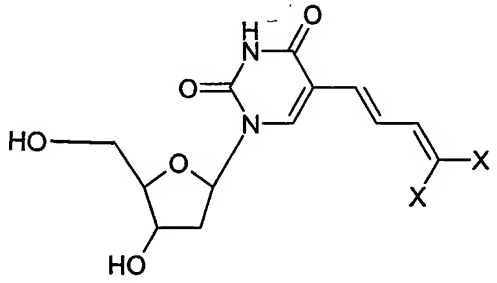


73. A compound according to claim 53, having the structure:



wherein X_d and X_e are independently the same or different and are selected from Cl, Br, I, and CN.

74. (NEW) A compound according to claim 53, having the structure:



wherein each X is selected from Cl, Br, I, and CN.

75. (NEW) A composition comprising a compound according to claim 53 and a carrier.

76. (NEW) A composition comprising a compound according to claim 53, and a pharmaceutically acceptable carrier.

77. (NEW) A method for screening for a therapeutic agent, comprising:

(a) contacting a sample containing a target cell with a compound according to claim 53;

(b) contacting a separate sample of the target cell with a potential therapeutic agent; and

(c) comparing the samples for inhibition of cellular proliferation or cell killing.

78. (NEW) A method according to claim 77, wherein the target cell is characterized as resistant to a chemotherapeutic drug.

79. (NEW) A method according to claim 77, wherein the target cell is characterized as expressing a target enzyme that is amplified as a result of selection *in vivo* by chemotherapy.

80. (NEW) A method according to claim 77, wherein the target enzyme is an endogenous intracellular enzyme that is overexpressed in the target cell.

81. (NEW) A method for inhibiting the proliferation of a pathological cell, wherein thymidylate synthase is overexpressed in the cell, comprising contacting the cell with an effective amount of the compound according to claim 53.

82. (NEW) A method according to claim 81, wherein the pathological cell is a colon cancer cell, a breast cancer cell, a gastric cancer cell, a head and neck cancer cell, a liver cancer cell, or a pancreatic cancer cell.

83. (NEW) A method according to claim 81, wherein the pathological cell is a colon cancer cell.